state, undeveloped, and not acting; while in others, the fault consisted in the absence of the uterus. or, in congenital closure of the os uteri (one case). As regards treatment, of course in most cases, nothing could be done; but, to remedy an undeveloped state of the uterus, Sir J. Y. Simpson had recommended the use of a galvanic pessary. A practical question was, whether we think that a patient ought to marry, in whom these defects were discovered. However reluctant we should be to condemn her to a single life, it should not be forgotten that another person is concerned in the matter, and therefore the decision against marriage is called for, or, if she be fully bent upon marrying, the other party ought to be fully informed as to the existing defect.—*Brit. Med. Journ.*, August 9, 1873.

59. *Unilateral Development.*—Dr. Ringland communicated to the Dublin Obstetrical Society a remarkable case of this in a young lady æt. 20, who had never menstruated naturally, but in whom vicarious discharges at each monthly period had occurred for more than four years, through the bladder, rectum, nose, or eyes. The left side of her body was perfectly developed sexually; while the right was not so. The left breast was normal, the right resembled that of a girl of 12; there was hair on the left side of the pubes, none on the right; the left labium was fully formed, the right was almost wanting. The clitoris, vagina, and uterus were absent. The left ovary could be felt, but the right could not be detected. Sexual desire existed in this case, but a strong opinion as to the inadvisibility of marriage was given.—*Ibid.*

60. *Form of the Body in New-born Children.*—Pfankuch calls in question the statement of Simpson, that male children are more exposed to danger than females during birth, on account of their greater size. He finds that, of children of equal weight, more males die than females; and, with the view of ascertaining whether this was to be accounted for by the size of the head, he has examined the relation between the head and the rest of the body in 714 new-born children. He finds that, towards the end of pregnancy, the increase in weight of the child is relatively more rapid than that of its length or of the size of its head, the body and limbs becoming more developed. For equal weights, boys are longer, and have larger heads than girls. First children are longer and have larger heads than those which follow them.—*Brit. Med. Journ.*, May 31, from *Archiv für Gynæcologie,* vol. iv., part 2.

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61. *Experiments with Snake Poison; Potassa as an Antidote.*—In a letter from Madras in the *Med. Times and Gaz.*, Aug. 23, 1873, the writer relates some experiments he witnessed made by Dr. John Shortt with snake poisons. He states, "We next witnessed a set of experiments to show the effects of liquor potassæ on the snake poison and on the animals poisoned with it. For this purpose a solution was made of four grains of dried cobra poison in half an ounce of distilled water. The dried poison had not lost an atom of its virulence (as we afterwards saw) although it was taken in August, 1870. The solution was slightly opalescent. On adding liquor potassæ to a still further diluted quantity, some striking chemical change evidently took place, for it speedily became of a bluish-black colour—at first slight; afterwards intense, like newly prepared ink.

"Having satisfied us of the reaction between the potassa and the poison, experiments were made on animals. Two dogs injected with the solution of cobra poison into the cellular tissue of the parietes of the chest died in one hour and thirty-five minutes and in two hours and forty-seven minutes respectively; whilst one dog that was injected first with cobra poison, and with diluted liquor potassæ afterwards, survived for four hours and fifty-seven minutes; and a rabbit that was injected with the dark mixture of cobra poison and liquor potassæ was quite unaffected by the operation. . . . . . The reader will see at once that in the effects of the liquor potassæ Dr. Shortt seems to point if not to an antidote yet to something like one."

A case is related from the *Madras Monthly Journ. Med. Sciences*, in which the potash treatment proved successful. This is the third successful case under this treatment. Dr. S. states: "Long before I had the opportunity of testing the action of the liquor potassæ on the human subject, I ascertained the property it possessed of neutralizing snake poison, and the difficulty I experienced was to introduce some means to expedite its action in the living blood. After repeated trials and experiments, I found that brandy as a diffusible stimulant roused the nervous system, excited the circulation, and thus carried the potash into it as rapidly as possible, and enabled it to overtake and neutralize the poison in the blood. The secret of success, then, consists in bringing the patient's system rapidly under the influence of the brandy—or in other words to make the patient *drunk* as speedily as possible, and maintain this effect for some time after. During the first forty-five hours of the patient's stay in hospital he took seventy-two ounces of brandy and four ounces and a half of the liquor potassæ by the mouth, fourteen ounces of brandy and three ounces and a half of the liquor potassæ by means of enemata through the rectum, and four ounces of the liquor potassæ was used in the bath he had. In all eighty-six ounces of brandy, and eleven ounces of the liquor potassæ were used in this case!"

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62. *Treatment of Snake-bite by Artificial Respiration.*—Mr. VINCENT RICHARDS records (*Indian Medical Gazette*, May 1, 1873), a series of eight experiments instituted on dogs, to test the value of artificial respiration, as suggested by Dr. Fayrer, in cases of snake-poisoning, and he thinks the results, though not absolutely successful, are very encouraging. In one case the heart's action was maintained for 10 hours, and then ceased only on the discontinuance of the artificial respiration; and in another, the heart was kept beating for 24 hours and 35 minutes, sensibility being restored after it had been completely lost.

The following is his explanation of the physiological action of snake-poison. When snake-poison is injected into the areolar tissue, as is usual in the case of a bite, absorption gradually takes place. When the poison reaches the lungs, it appears to excite the pneumogastric nerve, and through the medulla and spine the phrenic and intercostal nerves, principally leading at first to an accelerated action of the respiratory muscles, and afterwards, as a larger quantity of poison becomes circulated through the lungs, and the stimulus to the nerve-centres is augmented, to paralysis of them. Vomiting, which is a frequent, though not constant, symptom, probably arises from this irritation of the pneumogastric nerves. The medulla oblongata and spine are, indeed, primarily affected, and it is only as a secondary effect that the cerebral ganglia and cerebrum are involved. Presuming this to be the physiological action of the poison, it follows that a person fatally bitten dies from asphyxia produced by paralysis of the motor and respiratory nerves. The indication of cure, provided the effect of the poison on the nerve-centres is not permanent, is therefore artificial respiration. Moreover, if elimination of the absorbed poison can go on, as appears to be the case, we have good reason to hope for favourable results. When, however, the amount of poison injected is overwhelming, little, I think, can be hoped for from the treatment. That an animal may be affected even to convulsions, and yet ultimately recover without treatment, I have already shown (Fayrer's Thanatophida of India, p. 127), and I certainly think that when the quantity of poison injected into the areolar tissue would, under ordinary circumstances, be just sufficient to kill, artificial respiration, if properly maintained, might save life, as it does in the case of curara poisoning.

I believe it was this latter fact which first led Dr. Fayrer to make a trial of artificial respiration in snake-poisoning, and the subsequent encouraging results which he obtained induced him to suggest its adoption in such cases.